

ABSTRACT OF THE DISCLOSURE

The stereo calibration apparatus includes an image input device inputting an image from each of two image pickup devices, 5 a straight-line detector detecting at least four straight lines from each of two input images, a straight-line correspondence detector detecting at least four sets of corresponding lines by using an image feature in a neighboring area of the straight line, and a transformation matrix calculator calculating a 10 transformation matrix between two image pickup devices from the sets of corresponding lines.